

ABSTRACT

A process for depositing a diamond-like carbon film, which comprises providing a means for generating a sheet-like beam-type plasma region inside a vacuum vessel for depositing the diamond-like carbon film, and depositing the film on a substrate being moved through said plasma region. Also claimed is an apparatus for fabricating a magnetic recording medium by sequentially and continuously forming a magnetic layer and a diamond-like carbon film on a polymer substrate material, which comprises at least a first vacuum vessel for forming the magnetic layer of the magnetic recording medium and a second vacuum vessel for forming the diamond-like carbon film, provided that the pressure difference between the operation pressures for the first vessel and the second vessel is set in the range of from 10^{-2} to 10^{-5} Torr.